



Fact Sheet

NPDES Permit Number: AK-002254-3

Date:

Public Notice Expiration Date:

Contact: Ben Cope (206) 553-1442 or
1-800-424-4372 (within Region 10 only)
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The U.S. Environmental Protection Agency (EPA)
Plans to Reissue the Wastewater Discharge Permit for:

Municipality of Anchorage
Eagle River Wastewater Treatment Facility
Eagle River, Alaska

The State of Alaska Plans to Certify that the Permit Complies with:

- (1) Alaska Water Quality Standards; and
- (2) Alaska Coastal Management Requirements

EPA Proposes NPDES Permit Reissuance.

EPA proposes to reissue the existing National Pollutant Discharge Elimination System (NPDES) permit for Municipality of Anchorage Eagle River Treatment Facility (11024 Artillery Road). The draft permit sets conditions on the discharge--or release--of pollutants from the facility to the Eagle River.

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures
- information that forms the basis of the current permit conditions
- proposed revisions to current permit conditions

The State of Alaska proposes certification.

The Alaska Department of Environmental Conservation (ADEC) proposes to certify the NPDES permit for the Municipality of Anchorage Eagle River Treatment Facility under section 401 of the Clean Water Act.

The State of Alaska proposes a consistency finding.

The State of Alaska, Office of Management and Budget, Division of Governmental Coordination (DGC), proposes a finding of consistency with the Alaska Coastal Management Program.

EPA Invites Comments on the Draft Permit.

EPA will consider all substantive comments before issuing a final permit. Those wishing to comment on the draft permit may do so in writing by the close of the comment period. Comments should be mailed to this address:

U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue, OW-130
Seattle, Washington 98101
Attn: Ben Cope

After the comment period closes and all comments have been considered, EPA's regional Office of Water Director will make a final decision regarding permit issuance.

If no substantive comments are received on the proposed permit, the tentative conditions in the draft permit will become final, and the permit will become effective upon issuance. If comments are received, EPA will address the comments and issue the permit along with a response to comments. The permit will become effective 30 days after the issuance date, unless a request for an evidentiary hearing is submitted within 30 days.

EPA will hold a public hearing on the draft permit in the Anchorage area if there is sufficient public interest. Persons interested in requesting a public hearing on the draft permit should submit written requests to EPA by the close of the comment period. If there is sufficient public interest in a hearing, the comment period will be extended to allow time for a hearing. Details about the time and location of the hearing would be provided in a separate notice.

Persons wishing to comment on State Certification should submit written comments before the public notice expiration date to the Alaska Department of Environmental Conservation at this address:

Alaska Department of Environmental Conservation
Division of Air and Water Quality
610 University Avenue
Fairbanks, Alaska 99709-3643
Attn: Tim Wingerter

Documents Are Available for Review.

The draft NPDES permit and related documents can be reviewed at EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday. To request copies and other information, contact Ben Cope at (206) 553-1442 or 1 (800) 424-4372 (within Region 10 only). Those with impaired hearing or speech may contact a TDD operator at 1-800-833-6384. Additional services can be made available to persons with disabilities by contacting EPA.

The fact sheet and draft permit are also available at the Alaska Department of Environmental Conservation offices in Fairbanks (see address above) and at EPA's Alaska Operations Office in Anchorage, 222 W. 7th Ave #19.

The draft permit and fact sheet can also be found by visiting the Region 10 web site at www.epa.gov/r10earth/offices/water/npdes.htm.

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I. Facility Information

Municipality of Anchorage

Mailing Address:	Facility Location:
3000 Arctic Blvd.	11024 Artillery Rd.
Anchorage, AK 99503	Eagle River, AK 99577

NPDES Permit No.: AK-002254-3
Contact: Mark Premo, General Manager

The Municipality of Anchorage operates the Eagle River Wastewater Treatment Plant, a publicly owned treatment works in Eagle River, Alaska (see Figures 1 and 2). The facility provides secondary treatment prior to discharging the effluent into Eagle River approximately 1.5 river miles west of the Glenn Highway crossing at 61° 19' 10" N and 149° 35' 30" W. The plant receives primarily domestic waste water from local residents and commercial establishments. There are no significant industrial dischargers to the facility. The collection system has no combined sewers. The design capacity of the plant is 2.5 million gallons per day average dry weather flow.

II. Permit Chronology

The Eagle River plant has been operating under the National Pollutant Discharge Elimination System permit program since 1974. The current 5-year permit was issued April 12, 1995, and it expires on May 12, 2000. EPA plans to reissue the permit on or soon after the expiration date.

III. Current Discharge Quality

The Eagle River plant has generally reported compliance with effluent limitations in its Discharge Monitoring Reports (DMRs). A summary of reported plant performance for the 12 months of available DMRs is shown below:

Parameter	Maximum
Flow	1.4 mgd
Biochemical Oxygen Demand (BOD ₅), Weekly Avg Monthly Avg	3.1 mg/l 3.8 mg/l
Total Suspended Solids (TSS), Weekly Avg Monthly Avg	1.8 mg/l 3.0 mg/l
Fecal Coliform	13/100 ml
Total Residual Chlorine	non-detect
pH, min/max	6.5/6.8
Temperature	16°C
BOD ₅ Percent Removal (minimum)	99%
TSS Percent Removal (minimum)	99%
Ammonia	0.39 mg/l
Lead	7 ug/l
Copper	62 ug/l

In addition to monitoring of the above parameters, the Eagle River facility conducted a number of toxicity tests in the first year of the previous permit. While most of the tests results showed no toxic effects to test species, some tests showed chronic toxicity (reduced growth or reproduction) at or near levels of concern with respect to the available dilution in the mixing zone. One sample result in October 1995 for fathead minnow had a No Observed Effects Concentration (NOEC) of less than 5.5% effluent. This result led to additional testing by the facility in early 1996, and these three additional tests showed NOEC values of 22% effluent or greater. Based on these results, EPA proposes to retain a chronic toxicity monitoring requirement in the permit (see below).

IV. Basis of Permit Conditions

There have been no changes in the technology or water quality-based requirements that apply to the Eagle River plant municipal treatment plant since the development of the 1995 permit. Therefore, EPA proposes to reissue the permit with no changes to the permit limitations and a limited number of revisions to monitoring, reporting, and standard conditions. These proposed revisions are described below.

Since the fact sheet, response to comments, and TMDL for the 1995 permit continue to form the basis for the permit conditions, EPA has included these documents in the administrative record for this permit reissuance. EPA will provide copies of these documents to interested parties upon request (see contact information in the first part of this fact sheet).

V. Proposed Changes to the Permit

A. Monitoring

Toxicity

EPA proposes to eliminate toxicity testing requirements for acute effects to coho salmon fry, while retaining the quarterly chronic toxicity testing using fathead minnows and *ceriodaphnia dubia*. The coho fry testing to date has not shown acute effects to this organism, and acute effects are also monitored in the quarterly chronic tests. The quarterly chronic testing is retained because elevated toxicity to fathead minnows and *ceriodaphnia dubia* has been observed during the permit term. The quarterly testing is reduced to annual testing if toxicity is below levels of concern in the first two years of monitoring.

Ammonia Monitoring

The Eagle River facility has been in compliance with the ammonia limits in the current permit, but the facility has also indicated that elevated ammonia levels may have caused chronic toxicity in the discharge in 1995. While the reported ammonia levels since this period of time have been low, ammonia is monitored infrequently (monthly). EPA proposes to require more frequent ammonia monitoring (weekly), including measuring the ammonia levels in effluent samples tested for chronic toxicity.

Ambient Monitoring

The previous permit required the Eagle River facility to conduct ambient monitoring to assess metals levels in Eagle River upstream from the facility. The facility sampled 5 locations quarterly for one year (1996). An additional sampling was conducted in the summer of 1997.

While the monitoring generally found low concentrations of metals (consistent with water quality evaluations by EPA and ADEC for the previous permit), copper and lead levels exceeded Alaska water quality standards in each of the locations in July 1996. This included an upstream station (ER-1) which provides information about natural background concentrations. The elevated metals levels on the July 1996 sampling day appeared to corresponded to higher flows and suspended solids levels in the river.

Because the monitoring to date raises questions about the range of natural conditions and the appropriate water quality standards for the river, EPA proposes further ambient monitoring at the two stations upstream of human influences. EPA proposes monthly monitoring from May through September for three years, using the same upstream stations and protocols used in the previous monitoring program.

B. Reporting

Quality Assurance Plan

The previous permit required the Eagle River facility to develop and submit a Quality Assurance Plan for its compliance monitoring program. Since this requirement was met and the plan remains valid, the proposed permit simply requires the facility to follow the existing plan.

C. Sludge Language

The proposed NPDES wastewater permit no longer contains any requirements related to sewage sludge. EPA Region 10 has recently decided to change the regional approach to permitting disposal of biosolids by separating wastewater and sludge permitting. As a result, the sludge language in the Eagle River permit has been removed so it can be placed in a separate "sludge only" permit, to be issued at a later date. Under the CWA, EPA has the authority to issue separate "sludge only" NPDES permits for the purposes of regulating biosolids. EPA Region 10 has historically implemented the biosolids standards by inclusion of the biosolid requirements in the facility's NPDES wastewater permit, the other option authorized by the Act.

The Eagle River facility has updated its biosolids permit application for this facility as required. EPA will issue a sludge-only permit to this facility at a later date.

This will likely be in the form of a general permit through which EPA can cover and better serve multiple facilities.

Meanwhile, the environment will be protected since the permittees sludge activities will continue to be subject to the national sewage sludge standards at 40 CFR 503. The CWA prohibits any use or disposal of biosolids not in compliance with these standards. EPA has the authority under the CWA to enforce these standards directly, including in the absence of a permit. The CWA does not require the facility to have a permit prior to use or disposal of biosolids. Also, the State of Alaska conducts a program to review and approve biosolids activities.

D. Standard Conditions

Penalty Language

EPA has updated the language and penalty amounts in the standard conditions of the permit as a result of changes in the federal permitting regulations (40 CFR 122.41{a}) since the last permit was issued.

VI. Other Requirements

A. Endangered Species Act

Pursuant to the Endangered Species Act (ESA), EPA contacted US Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to determine whether there are any threatened or endangered species were in the vicinity of the discharge. EPA received letters from USFWS (dated November 16, 1999) and NMFS (dated November 19, 1999) indicating that there are no ESA species in the area of the discharge. Therefore, EPA has determined that the discharge will have no affect on any threatened or endangered species.

B. Essential Fish Habitat

The Magnuson-Stevens Act (January 21, 1999) requires federal agencies to consult with NMFS when any activity proposed to be permitted, funded, or undertaken by a federal agency may have an adverse effect on designated Essential Fish Habitat (EFH) as defined by the Act. The EFH regulations define an *adverse effect* as any impact which reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site-specific, or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

In a November 19, 1999, letter to EPA, NMFS indicated that the EFH species for Eagle River are king, sockeye, coho, pink, and chum salmon.

Since the proposed permit has been developed to protect all aquatic life species in Eagle River in accordance with the Alaska water quality standards, EPA has tentatively determined that issuance of this permit is not likely to adversely affect any EFH in the vicinity of the discharge. EPA will provide NMFS with copies of the draft permit and fact sheet during the public notice period. Any comments received from NMFS regarding EFH will be considered prior to reissuance of this permit.

C. State Certification

Because this permitting action affects state waters, the provisions of Section 401 of the Act apply. In accordance with 40 CFR §124.10(c)(1), public notice of the draft permit has been provided to the State of Alaska agencies having jurisdiction over fish, shellfish, and wildlife resources.

If the State of Alaska authorizes any changes to the 1995 mixing zones in its 401 certification, EPA will revise the permit limits accordingly prior to reissuance of the final permit.

D. Coastal Zone Management Act (CZMA)

The state of Alaska will be reviewing this permit to determine consistency with the Coastal Zone Management Act.

E. Permit Term

This permit shall expire five years from its effective date.

Appendix A : Facility Location Maps

